SONY

LCD Data Projector

VPL-PX31/PX21

Always a Brilliant Performance

Keys to Powerful Presentations

– provided by the Sony VPL-PX31/PX21 LCD Projector

Visuals

Leave a lasting impression.

With 2800 ANSI lumens, it is easy to see your presentation in any environment. And the APA, 3D Gamma Correction, RGB Enhancer, and Digital Keystone features will make your pictures look their best.

Audio

Complete the experience.

A three-way stereo speaker system will support your visuals.

Presentation tools

Make life easier for you and your audience.

PROJECTOR STATION software, USB functions keys, Digital Zoom, and a laser pointer will help you make your presentations run smoothly. And keep your audience involved. Your main presentation tool – your projector – should go unnoticed. The VPL-PX31/PX21 is almost silent.

Flexibility

With wide installation capabilities.

The VPL-PX31/PX21 can be mounted on a ceiling, on a floor or installed in a rear projection system. Combined with a choice of three optional lenses, it has the flexibility to be used in a wide range of installations. An extensive array of inputs lets you choose what signal to use.

For Powerful Presentations . . . the VPL-PX31/PX21

Picture Quality

Brightness and Resolution

With the newly developed Sony LCD panels and a 200 W UHP lamp, the VPL-PX31 offers an outstanding brightness of 2800 ANSI lumens, while the VPL-PX21 provides an impressive 1800 ANSI lumens. You can project a high-quality, high-contrast image, even in high ambient light conditions.

XGA VPL-PX31 XGA VPL-PX21

The VPL-PX31 and VPL-PX21 both utilize three 1.3-inch XGA LCD panels. The details of the original images are maintained, while rich and natural colors are reproduced.

APA (Auto Pixel Alignment)

Dot phase and image size or shift can be automatically adjusted to their optimal settings just by pressing the APA button.

3D Gamma Correction

The 3D Digital Gamma correction circuit provides superb gray scale reproduction and, at the same time, helps to improve overall picture uniformity.

RGB Enhancer

For a crisper RGB image, the VPL-PX31/PX21 is equipped with an RGB Enhancer function. A simple adjustment provides heightened image quality to match any image source – whether text, photos, or graphics.

Effective Presentations

The VPL-PX31/PX21 makes effective presentations as simple as possible with a variety of advanced features. And with fan noise of less than 34 dB, the VPL-PX31/PX21 also makes your presentations as silent as possible.

Digital Zoom

The VPL-PX31/PX21 is equipped with a 4-times Digital Zoom that is easily controlled via the supplied RM-PJM610 remote control unit. With Digital Zoom, you can focus in on a section of your presentation for more detail.

USB Capability

The VPL-PX31/PX21 is USB-ready and can serve as a USB hub for daisychain connection of multiple devices. It can be controlled from a PC on which the supplied PROJECTOR STATION version 2.0 software has been installed.

PROJECTOR STATION

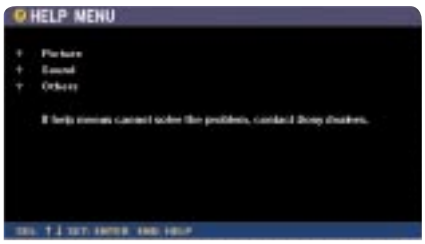
– Promoting greater integration between projector and computer

PROJECTOR STATION* software from Sony will make your presentations go off without a hitch. Not only does this software let you control the VPL-PX31/PX21 from your computer, it also helps you organize your presentation materials for quicker access, using the two function keys on the remote control unit.

** PROJECTOR STATION version 2.0 software requirements: Microsoft® Windows® 98, Windows® 98 SE or Windows® 2000 operating system.*

Help Menu

The on-screen Help Menu of the VPL-PX31/PX21 will assist in trouble-shooting during operation. Easy-to-follow prompts will guide you to the solution of your problem.



Remote Control Unit

The laser pointer-equipped remote control unit lets you direct your audience's attention and guide them through your presentation.

RM-PJM610
remote control unit

Stereo Sound

A three-way speaker system provides stereo sound to complement your presentation visuals.

Flexibility

The VPL-PX31/PX21 is designed for use in a variety of environments.
Even with its portable design, it functions equally well when installed for ceiling, floor, or rear projection use.

Optional Lenses

Three optional lenses are available, giving you the ability to customize the VPL-PX31/PX21 to perfectly suit your projection environment.

VPLL-FM21
- Fixed short focus lens
- Throw ratio*: 0.9:1

VPLL-ZM31
- 1.1 times zoom short focus lens
- Throw ratio: 1.55-1.62:1

VPLL-ZM101
- 1.5 times zoom long focus lens
- Throw ratio: 3.35-4.9:1

**Throw ratio is the distance between the center of the projector lens and the screen, divided by the screen width.*

Lamp Power Selection

The lamp power of the VPL-PX31/PX21 is selectable via the on-screen Lamp Mode menu. When set to LOW, lamp life is approximately doubled and fan noise is further reduced. Yet the VPL-PX31 still produces an impressive 2100 ANSI lumens. When set to LOW, the VPL-PX21 produces 1350 ANSI lumens.

Digital Keystone

Keystone distortion, caused when the projection angle is not properly calibrated, can be easily corrected within the wide adjustment range of +/- 20 degrees via the on-screen menu.

Signal Support

For added versatility, the VPL-PX31/PX21 accepts a wide range of input signals: Composite Video, S Video, Y/R-Y/B-Y, YP_BP_R, and RGB, with a horizontal frequency of 15 to 91 kHz and a vertical frequency of 43 to 85 Hz. Anticipating the move from analog to digital, a Digital RGB input has also been added. Finally, to meet the demands of DTV, a variety of digital signals (480/60P, 575/50P, 1080/50I, 720/60P, 720/50P) are also fully supported.

On-Screen Display

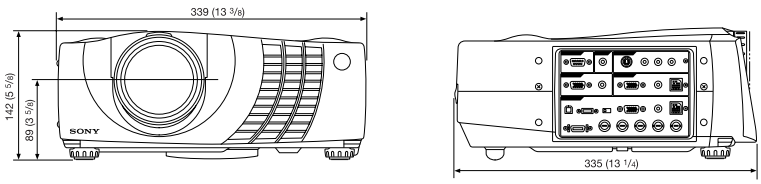
The on-screen display menu is available in seven languages.

Specifications

Model		VPL-PX31	VPL-PX21
Optical	Projection system	3 LCD panels, 1 lens projection system	
	LCD panel	1.3-inch p-Si TFT Sony LCD panel 2,359,296 pixels (786,432 pixels x 3)	
		with Micro Lens Array	without Micro Lens Array
	Projection lens	Approx. 1.3 times zoom lens, F1.7 to 2.0, f36.7 to 47.8 mm	
	Lamp	200 W UHP Lamp	
	Screen coverage	40 to 300 inches (viewable area, measured diagonally)	
	Light output	2800 ANSI lumens*1	1800 ANSI lumens
Signals	Color system	NTSC, PAL, SECAM, NTSC4.43, PAL-M, PAL-N (automatically/manually selected)	
	Resolution	Video: 750 TV lines, RGB: 1024 x 768 pixels	
	Acceptable signals	RGB (fH 15 to 91 kHz, fV: 43 to 85 Hz), 15 kHz component 50/60 Hz system, Progressive component 60 Hz system, DTV (480/60P, 575/50P, 1080/50I, 720/60P, 720/50P), Composite video, Y/C video	
General	Cabinet color	Silky Silver	
	Speaker	Max. 5 W Wide frequency range 3 speakers Woofer: 65 mm (2 5/8 inches) diameter, Max. 3 W Tweeter: 45 mm (1 3/16 inches) diameter, Max. 1 W x 2 (Stereo)	
	Power requirements	100 to 240 V, 50/60 Hz	
	Power consumption	Max. 290 W, Standby 5 W, Power saving mode 50 W	
	Operating temperature	0 to 40 °C (32 to 104 °F)	
	Operating humidity	35 to 85 %	
	Dimensions	339 (W) x 142 (H) x 335 (D) mm (13 3/8 x 5 5/8 x 13 1/4 inches)	
	Mass	Approx. 7.2 kg (15 lb 14 oz)	
	Heat dissipation	989.6 BTU	
	Fan noise	Less than 34 dB (when lamp mode set to LOW: 30 dB)	
Inputs/Outputs			
VIDEO IN	Composite	Phono type, 1.0 Vp-p ±2 dB sync negative, 75 Ω	
	Y/C IN	Mini DIN 4-pin	
	Y	1.0 Vp-p ±2 dB sync negative, 75 Ω	
	C	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω	
INPUT A		HD D-sub 15 pin (female)/5 BNC (female)/Digital Interface Switched	
	Analog RGB	HD D-sub 15-pin (female)	
	R	0.7 Vp-p ±2 dB positive, 75 Ω	
	G	0.7 Vp-p ±2 dB positive, 75 Ω	
	G with Sync	1.0 Vp-p ±2 dB sync negative, 75 Ω	
	B	0.7 Vp-p ±2 dB positive, 75 Ω	
	SYNC/HD		
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	VD		
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	Analog RGB/Component	5 BNC (female)	
	R/R-Y/PR	0.7 Vp-p ±2 dB positive, 75 Ω	
	G	0.7 Vp-p ±2 dB positive, 75 Ω	
	G with Sync/Y	1.0 Vp-p ±2 dB sync negative, 75 Ω	
	B/B-Y/PB	0.7 Vp-p ±2 dB positive, 75 Ω	
	SYNC/HD		
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	VD		
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	Digital RGB	DFP 20-pin (TMDS)	
	USB HUB	Up (B type: female) x 1, Down (A type: female) x 1	
	MOUSE IN	Square 13-pin (female)	
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ	
INPUT B	Analog RGB	HD D-sub 15-pin (female)	
	R	0.7 Vp-p ±2 dB positive, 75 Ω	
	G	0.7 Vp-p ±2 dB positive, 75 Ω	
	G with Sync	1.0 Vp-p ±2 dB sync negative, 75 Ω	
	B	0.7 Vp-p ±2 dB positive, 75 Ω	
	SYNC/HD		
	Composite sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	Horizontal sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	VD		
	Vertical sync	1.0 to 5.0 Vp-p, high impedance positive/negative	
	MOUSE IN	Square 13-pin (female)	
	AUDIO IN	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ	
OUTPUT	MONITOR OUT*2	HD D-sub 15-pin (female) R/R-Y, G/Y, B/B-Y: Gain Unity, 75 Ω SYNC/HD, VD: 4.0 Vp-p (open), 1.0 Vp-p (75 Ω)	
	AUDIO OUT (Variable out)	Stereo mini jack, max. 1 V rms, when the input signal is 500 mV rms, impedance less than 5 kΩ	
REMOTE	RS-232C	D-sub 9-pin (female)	
CONTROL S IN/ PLUG IN POWER		Stereo mini jack 5.0 Vp-p, plug in power, DC 5 V	
Safety regulations		UL1950, cUL1950, DHHS (Laser), FCC Class A, IC Class A, EN 60 950 (Nemko), CE, EN 60 825-1 (Laser), C-Tick, CCIB, VCCI class B, JEIDA	
Laser beam	Laser type	Class II	
	Wavelength	645 nm	
	Output	1 mW	
Supplied accessories	Remote Commander RM-PJM610, Monitor Cable (2 m): HD D-sub 15-pin to HD D-sub 15-pin, Mouse Cable (2 m): SIC-S21 (for Serial), SIC-S22 (for PS/2), Audio Visual Cable (1.5 m), USB Cable A type to B type (2 m), USB Application Software PROJECTOR STATION version 2.0, AA size Battery (x 2), Lens Cap, Strap for Remote Commander, Air Filter, Operating Manual, Quick Reference Sheet, Installation Manual for dealers		

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228. *2 DIGITAL RGB signal is not output from the MONITOR OUT terminal. *3 Not available in some areas. For details, please contact your nearest Sony office.

Dimensions



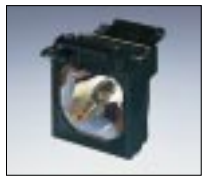
Unit: mm (inches)

Input Signal Preset Data

No.	Resolution		fH (kHz)	fV (Hz)	H/V
1	Video 60 Hz		15.734	59.940	N/N
2	Video 50 Hz		15.625	50.000	N/N
3	15 K RGB/Component 60 Hz		15.734	59.940	SonG
4	15 K RGB/Component 50 Hz		15.625	50.000	SonG
5	HDTV 1035&1080/60I	1035/60I, 1080/60I	33.750	60.000	SonG
6	640x350	VGA-1	31.469	70.086	P/N
7		VGA VESA 85	37.861	85.080	P/N
8	640x400	NEC PC98	24.823	56.416	N/N
9		VGA-2/VESA 70	31.469	70.086	N/P
10		VGA VESA 85	37.861	85.080	N/P
11	640x480	VGA VESA 60	31.469	59.940	N/N
12		Mac 13	35.000	66.667	SonG
13		VGA VESA 72	37.861	72.809	N/N
14		VGA VESA 75	37.500	75.000	N/N
15		VGA VESA 85	43.269	85.008	N/N
16	800x600	SVGA VESA 56	35.156	56.250	P/P
17		SVGA VESA 60	37.879	60.317	P/P
18		SVGA VESA 72	48.077	72.188	P/P
19		SVGA VESA 75	46.875	75.000	P/P
20		SVGA VESA 85	53.674	85.061	P/P
21	832x624	Mac 16	49.724	74.550	N/N
22	1024x768	XGA VESA 43	35.524	43.479	P/P
23		XGA VESA 60	48.363	60.004	N/N
24		XGA VESA 70	56.476	69.955	N/N
25		XGA VESA 75	60.023	75.029	P/P
26		XGA VESA 85	68.677	84.997	P/P
27	1152x864	SXGA VESA 70	63.995	70.019	P/P
28		SXGA VESA 75	67.500	75.000	P/P
29		SXGA VESA 85	77.487	85.057	P/P
30	1152x900	SUN LO	61.795	65.960	N/N
31		SUN HI	71.713	76.047	CNeg
32	1280x960	SXGA VESA 60	60.000	60.000	P/P
33		SXGA VESA 75	75.000	75.000	P/P
34	1280x1024	SXGA VESA 43	46.433	43.436	P/P
35		SGI-5	53.316	50.062	SonG
36		SXGA VESA 60	63.974	60.013	P/P
37		SXGA VESA 75	79.976	75.025	P/P
38		SXGA VESA 85	91.146	85.024	P/P
43	P. Component 480/60P	480/60P(2x NTSC)	31.470	60.000	SonG
44	575/50P	575/50P(2x PAL)	31.250	50.000	SonG
45	1080/50I	1080/50I	28.130	50.000	
47	720/60P	720/60P	45.000	60.000	
48	720/50P	720/50P	37.500	50.000	

Optional Accessories

Projector Lamp
LMP-P201
(for replacement)


LMP-P201

Carrying Case
VLC-600*3

Suspension Support
PSS-610

Signal Cables
SMF-400
(HD D-sub 15-pin to 5 BNC, for RGB signal)
SMF-402
(HD D-sub 15-pin to phono x 3, for component signal)
SMF-410
(HD D-sub 15-pin to HD D-sub 15-pin, for RGB signal)

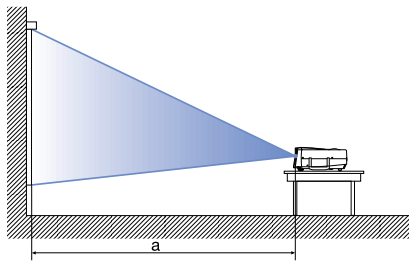
Digital Signal Cables
SMF-D102
SMF-D110

Mouse Cables
SIC-S20 (for Mac®)
SIC-S21 (for Serial)
SIC-S22 (for PS/2)

Macintosh® Adaptor
ADP-20
(Macintosh to VGA)

Optional Lenses
VPLL-FM21
(Fixed short focus lens)
VPLL-ZM31
(Short focus zoom lens)
VPLL-ZM101
(Long focus zoom lens)

Throwing Distance



Screen size		40-inch	60-inch	80-inch	100-inch	120-inch	150-inch	200-inch	300-inch
a (min.)	mm	1490	2280	3060	3850	4630	5810	7770	11700
	inches	58 3/4	89 7/8	120 1/2	151 5/8	182 3/8	228 3/4	306	460 3/4

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